



Wilson's Creek National Battlefield

General Management Plan Amendment /
Environmental Assessment / Assessment of Effect
for the Civil War Museum and Addition Lands



Photos on the cover, from the top clockwise, are as follows:

Artist's depiction of the battle

Battlefield fence line

Park ranger explains artillery positions during the Battle of Wilson's Creek

Artillery battery

The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

General Management Plan Amendment / Environmental Assessment / Assessment of Effect
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July 2007

Wilson's Creek National Battlefield ♦ Missouri

Wilson's Creek National Battlefield is about 10 miles south of the city of Springfield, Missouri, on the boundary between Greene and Christian counties in the southwestern corner of the state. The national battlefield was established on April 22, 1960, to preserve and commemorate the Battle of Wilson's Creek, the site of the second battle of the Civil War and the first major battle west of the Mississippi River.

The 2003 *General Management Plan / Environmental Impact Statement* for Wilson's Creek identified important resources associated with the Battle of Wilson's Creek that are not managed or protected by the National Park Service and recommended adjusting the national battlefield's boundaries in a number of areas to protect these critical resources and enhance opportunities for public enjoyment. A portion of the recommended lands were added to the national battlefield in 2004.

This *General Management Plan Amendment / Environmental Assessment/Assessment of Effect* proposes management alternatives for two of the areas identified in the boundary assessment — the Civil War Museum and its surrounding 20-acre site and a 154-acre area that adjoins the national battlefield's southwestern boundary. Two action alternatives are compared with the no-action alternative (alternative A) that describes the continuation of existing conditions.

- **Alternative B — Relocate the Civil War Museum Collections into an Addition to the Wilson's Creek National Battlefield Visitor Center (Preferred Alternative).** Under this alternative, the existing Civil War Museum would be closed and the museum collections moved into an addition to the visitor center built for curatorial storage and

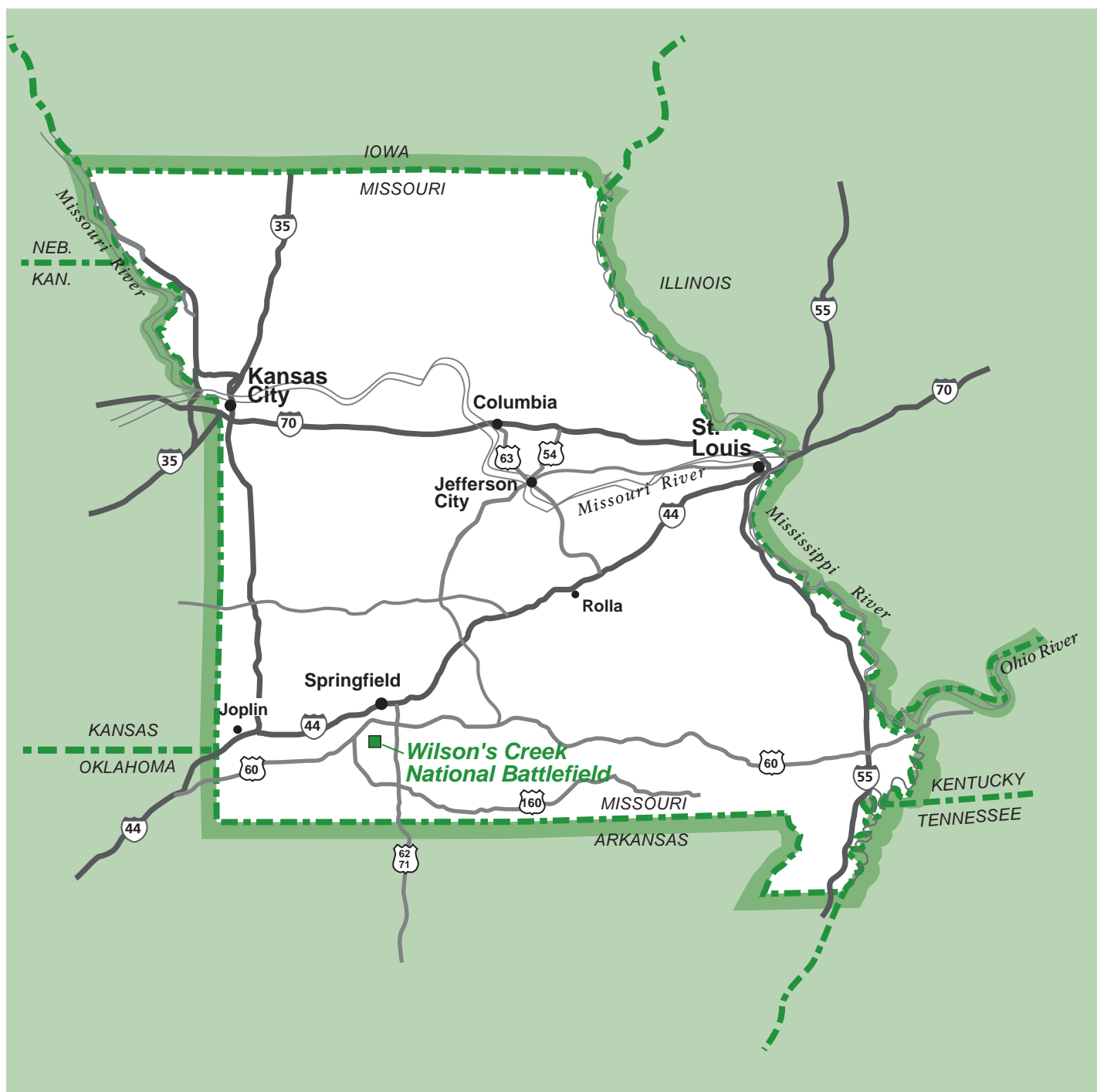
exhibit space. Most NPS administrative functions would remain in the visitor center.

- **Alternative C — Move the Civil War Museum Collections into Existing Administrative Space in the Visitor Center.** Under this alternative, existing space in the visitor center would be rehabilitated for curatorial and exhibit space for the museum collections. Most NPS administrative functions would then move into buildings previously used as a residence and museum on the 20-acre site, which would be rehabilitated for this purpose.
- Under both action alternatives, the 154 acres adjacent to the southwestern boundary would be managed consistent with the management zoning on the adjacent lands. Limited visitor parking and pedestrian trails could be developed, including the potential for a link to the national battlefield. Sensitive cultural and natural resources in this area would receive a high level of protection. Any construction or operational activities would be done in a sustainable manner to minimize adverse impacts on natural and cultural resources.

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NORTH Map not to scale

Region

General Management Plan Amendment Wilson's Creek National Battlefield

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BACKGROUND



INTRODUCTION

Wilson's Creek National Battlefield, a unit of the national park system, preserves a place of great significance in the history of the Civil War — the site of the war's second major battle and the first battle fought west of the Mississippi River. The national battlefield's 1,921 acres encompass 80% of the ground where, on August 10, 1861, 5,400 Union troops under General Nathaniel Lyon clashed in a brutal fight with 12,000 Confederate and Missouri State Guard soldiers under Generals Benjamin McCulloch and Sterling Price.

PURPOSE OF AND NEED FOR THE GENERAL MANAGEMENT PLAN AMENDMENT

The general management plan (GMP) is the primary planning document for units of the national park system. The management planning process describes specific desirable resource conditions and visitor experiences consistent with the National Park Service (NPS) mission to conserve natural and cultural resources unimpaired for the enjoyment of future generations.

The general management planning process assesses alternate management strategies for achieving these goals and provides a framework to guide NPS management decision-making and sustainable practices for the next 15 to 20 years.

Wilson's Creek National Battlefield completed its current general management plan in 2003. A boundary assessment was completed as part of that planning process in which the National Park Service identified other important resources associated with the Battle of Wilson's Creek that were not managed or protected by the National Park Service. The plan recommended adjusting the national battlefield's boundaries to incorporate these critical resources. This

would provide additional protection for these resources and enhance public enjoyment of Wilson's Creek National Battlefield. A land protection plan for these areas, which is based on the 2003 *General Management Plan / Environmental Impact Statement*, is in draft. A legislative proposal was prepared in June 2003. Public Law 108-394 revised the boundary of the national battlefield and authorized the acquisition of property within the new boundary. As a result, a portion of the recommended lands were added to the national battlefield in 2004.

The 2003 management plan provides overall guidance for the actions described in this *General Management Plan Amendment / Environmental Assessment / Assessment of Effect*. The purpose of this amendment is to develop and analyze management and protection strategies for resources added to the national battlefield as a result of the boundary adjustment (see following map) recommended in the 2003 *General Management Plan*. This includes the application of the appropriate management prescriptions from the 2003 *General Management Plan* on the lands and resources added to the national battlefield. These include the following:

- **The Civil War Museum Site.** This 20-acre site, which is north of the original national battlefield boundary, was included in the national battlefield to enhance the ability of the national battlefield to fulfill its mission to preserve and commemorate the Battle of Wilson's Creek. The primary goal was to acquire, preserve, and interpret the museum collections. (Hereafter in this document museum collections is used to refer to the prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens). This collection was determined to be one of the finest private Civil War collections in the United

States. In addition to the collections, the site consists of the Civil War Museum building and other buildings. Portions of the Union columns marched across these lands on their way to attack the Confederate forces camped along Wilson's Creek.

- **The Southwest Addition Lands.** This 154-acre parcel adjacent to the southwest boundary of the national battlefield was acquired from the Battlefield Foundation. This site contains both cultural and natural resources associated with the Battle of Wilson's Creek. Confederate troops passed through this area before commencing their decisive flanking attack on the Union position on Bloody Hill.

This area includes approximately 135 acres of fescue hayfields, two buildings and five building foundations, two cold water springs, a stream and riparian area, and one limestone glade. Aquatic surveys have been conducted in the stream and to date no federal listed species have been found. The glade is approximately 5 acres in size and is in a degraded condition.

Preservation and interpretation of this area would enhance visitor understanding of the role that transportation played in the Battle of Wilson's Creek and the impact of the battle on the lives of civilians. The primary goal was to preserve and interpret the Wire and York Roads, Guinn farm site, and Double Spring.

PURPOSE AND SIGNIFICANCE OF WILSON'S CREEK NATIONAL BATTLEFIELD

During the development of the 2003 *General Management Plan*, planners refined the purpose and significance statements for the national battlefield. Based on a review of the national battlefield's enabling legislation and the professional expertise of national battle-

field staff, NPS historians, and other subject-matter experts, the national battlefield's purpose and three significance statements were identified. With the acquisition of the Sweeney collection, the significance of the national battlefield has been amended to address the substantial artifacts from the Civil War Trans-Mississippi theatre.

Purpose

- The purpose of Wilson's Creek National Battlefield is to commemorate the Battle of Wilson's Creek, preserve the associated battlefield, and interpret the battle within the context of the Civil War in the Trans-Mississippi West.

Significance

- Wilson's Creek National Battlefield is significant as the site of the second battle of the Civil War and the first major battle west of the Mississippi River.
- Wilson's Creek National Battlefield is the site of the death of General Nathaniel Lyon, the first Union general killed in the Civil War. Lyon's death focused national attention on the potential loss of Missouri to the Confederacy.
- Wilson's Creek's rural character evokes the setting experienced by the combatants.
- The artifacts and archival records in Wilson's Creek National Battlefield's museum collections represent a nationally prominent and comprehensive documentation of the Civil War in the Trans-Mississippi West.

The purpose and significance of the national battlefield guided the development of the management alternatives in the 2003 plan as well as the alternatives described in this *General Management Plan Amendment*.



MAP NOT TO SCALE

Boundary Adjustments

Wilson's Creek National Battlefield General Management Plan Amendment

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INTERPRETIVE THEMES

Since the 2003 *General Management Plan* was completed, a “Long Range Interpretive Plan” was finalized for the national battlefield. The primary interpretive themes listed below are included here to illustrate stories that are related to the Civil War, the Battle of Wilson’s Creek, and the museum collections. These themes provide the foundation for all interpretive media (e.g., exhibits, films, brochures) and programs at the national battlefield.

- Because Missouri was a western border state, social, economic, ethnic, and political differences fueled animosities between groups, ultimately leading to civil war.
- The strategic importance of Missouri and the personalities, decisions, and motivations of political and military leaders greatly influenced the military campaign and battle.
- Many interrelated factors — leadership, tactics, weaponry, landscape and terrain features, and the use of volunteer forces — contributed to the outcome of the battle and resulted in an unusually hard-fought and bloody military engagement.
- While the Union’s battlefield defeat, the death of General Lyon, and the potential loss of southwest Missouri by Federal troops forced the North to reassess its commitment to the war in the Trans-Mississippi, the victory at Wilson’s Creek gave hope and confidence to the South.
- The residents along Wilson’s Creek found themselves engulfed in the violence of battle and subjected to guerilla warfare and severe military policies that they resented long after the war ended.
- The preservation and commemoration of the battlefield reflects the desire of people to remember and honor the dedication to duty, patriotism, and personal sacrifices of our ancestors.

The 2003 management plan provides overall guidance for the actions described in this *General Management Plan Amendment / Environmental Assessment/Assessment of Effect*, which describes management alternatives for two of the areas identified in the boundary assessment that have since been added to the national battlefield.

IMPACT TOPICS ANALYZED

The impact topics for this project have been identified on the basis of federal laws, regulations, and orders, and NPS policies. The impact topics carried forward for analysis in this environmental assessment are listed below, along with the reasons why the impact topic is further analyzed. For each of these topics there is a description of the existing setting or baseline conditions (i.e., the affected environment) within the project area. This information will be used to analyze impacts against the current conditions of the project area in the Environmental Consequences section of the document.

Museum Collections

The Wilson’s Creek National Battlefield’s Civil War Museum has the nation’s largest archival and materials collections related to the Civil War in the Trans-Mississippi West. The outstanding collection of more than 15,000 artifacts includes the sword belt and sash of Arkansas General Patrick Cleburne and the flag of the Confederate “Cherokee Braves.”

The main national battlefield archival collections contain more than 4,000 volumes and extensive primary documentation. The museum collections contain approximately 40,000 artifacts related to the battle and the war in the Trans-Mississippi region. These include one-of-a-kind pieces related to the battle, such as General Lyon’s presentation

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sword and scabbard, the Lyon bed, and the counterpane used to cover Lyon's body.

The actions described in the alternatives could result in beneficial effects on the museum collections. Therefore, this topic has been carried forward for further analysis.

Cultural Landscapes

According to the NPS *Cultural Resource Management Guideline*, a cultural landscape is a reflection of human adaptation and use of natural resources, and it is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built.

At the time of the battle, the valley of Wilson's Creek was a thriving agricultural setting with several farms and homes for numerous families. Only a few remnants of this agricultural community remain. Other landscape features played key roles in the outcome of the battle.

The battlefield landscape at Wilson's Creek retains fair-to-good physical integrity. The vegetative changes that have taken place since the battle are reversible. Vegetation management consistent with the national battlefield's fire management plan (NPS 2004) and recommendations in the "Cultural Landscape Report for Wilson's Creek National Battlefield" (NPS 2004) can modify the national battlefield's appearance to resemble more closely the historic conditions, thereby enhancing the national battlefield's integrity.

Important elements of the battlefield landscape such as the Wire Road, the York Road, Double Spring, the Guinn farm site, and areas of combat (i.e., cannon captured) are located in the southwest addition lands recently added to the national battlefield and that are addressed by this amendment.

The actions described in the alternatives could have a measurable effect on elements of the cultural landscape at Wilson's Creek.

Therefore, this topic has been carried forward for further analysis.

Visitor Use and Experience

According to NPS *Management Policies 2006*, the enjoyment of Wilson's Creek National Battlefield resources and values by current and future generations is a fundamental purpose of all national battlefields. The National Park Service is committed to providing appropriate, high-quality opportunities for visitors to enjoy the park units and will maintain within the park units an atmosphere that is open, inviting, and accessible to every segment of society.

Many visitors to Wilson's Creek National Battlefield begin their visit at the visitor center, where they can receive an orientation to the national battlefield, talk with NPS staff, buy materials at the cooperating association sales area, and see exhibits about the battle. A 14-minute video at the visitor center presents the battle's historical background. In addition, an eight-minute program conducted on a lighted battle map illustrates the course of the battle. About 50% of visitors to the national battlefield use the visitor center to see the video, exhibits, or lighted battle map. The visitor center is accessible by wheelchair from the parking area.

An excellent Civil War research library in the visitor center is open to visitors and researchers on an advanced reservation basis, although only a small percentage of visitors use the library. The research library does not maintain open stock or permit visitors to check out material.

Living history programs depicting Civil War soldier life are presented, and guided tours of Bloody Hill are provided on weekends during the summer. In addition, NPS staff and

volunteers present several special events throughout the year, including a moonlight tour and anniversary celebration in August, artillery and musket-firing demonstrations in the summer, and several genealogical programs.

The 4.9-mile paved tour-road loop, with eight interpretive stops at significant battle points, provides a self-guided automobile tour of the battlefield. In addition to the tour-road loop, there are five walking trails (varying in length from 0.25 to 0.75 of a mile) that are accessible to visitors from the tour-road loop that provide access to additional battle-related sites. One trail leads to the Ray House, a historic house built before the battle that served as a temporary field hospital for Confederate soldiers following the battle. The body of General Nathaniel Lyon was taken here after he was killed in battle; the bed on which the general's body was placed remains on exhibit in one of the house's rooms.

The Civil War Museum provides a broader contextual view of the Battle of Wilson's Creek and the Civil War west of the Mississippi River. Visitors to the Civil War Museum must exit the main national battlefield to Highway ZZ and drive north 0.25 mile to the museum.

Viewing the artifacts in the Civil War Museum collections has a substantial effect on visitor understanding of the Battle of Wilson's Creek and the war in the Trans-Mississippi West. Because the actions in the action alternatives could have a beneficial effect on visitor opportunities to see the Civil War collections, this topic has been carried forward for further analysis.

NPS Operations

NPS Management Policies 2006 state that park units will pursue a human resources program that is comprehensive, that is based on competency, and that encompasses the entire

workforce, including employees, volunteers, contractors, concession employees, interns, and partners.

NPS operations for Wilson's Creek National battlefield include administration, law enforcement, interpretation and education, and facility management. Most operations for the national battlefield are concentrated at the main national battlefield unit. However, some staff time is dedicated to the operations, management, and protection of the Civil War Museum.

The actions described in the alternatives could affect NPS operations, including staffing, law enforcement, facility management, and traffic circulation. Therefore, this topic has been carried forward for further evaluation.

IMPACT TOPICS DISMISSED FROM FURTHER CONSIDERATION

Some impact topics have been dismissed from further consideration, as listed below. The rationale for dismissing these specific topics is stated for each topic.

Historic Structures

Consultation with the Missouri State Historic Preservation Officer concluded that none of the structures on the 20-acre site or within the 154-acre southwest addition lands are eligible for listing in the National Register of Historic Places. Therefore, the topic of historic structures has been dismissed from further analysis.

Archeological Resources

Consultation with the Missouri State Historic Preservation Officer is ongoing. Previous archeological surveys (NPS 2001) indicate that there are no known archeological sites in the areas proposed for development. As

BACKGROUND

appropriate, archeological surveys and/or monitoring would precede any construction.

Implementation of certain elements of the action alternatives could disturb previously undiscovered subsurface materials or features, although the probability for undiscovered archeological resources in this area is low. Trail development and removal of non-historic buildings in the southwest addition lands could uncover or disturb archeological resources. To limit potential impacts to these unknown resources, an archeologist or cultural resource expert would monitor all ground-penetrating activities. If previously unknown archeological materials are discovered, the cultural resource expert would immediately halt work in that area and contact the Missouri State Historic Preservation Officer.

The construction at the visitor center under alternative B would occur in a previously disturbed area. Due to the low probability for previously undiscovered archeological resources, and because a cultural resource monitor would be secured for any ground-penetrating activities, this project is expected to have negligible impacts on archeological resources; therefore, this topic has been dismissed from further analysis.

Ethnographic Resources

Ethnographic resources, such as a site, structure, landscape or natural resource feature assigned traditional, legendary, subsistence, religious, or other significance in addition to traditional cultural properties, do not exist in the area of the national battlefield under consideration in this amendment. Traditional cultural properties are ethnographic resources that can be associated with cultural practices or beliefs and that are either eligible for inclusion in, or are listed on, the National Register of Historic Places. Such properties could be sites regarded as sacred, locations for gathering resources, activity areas, or other areas of

ongoing traditional use. Because no ethnographic resources or traditional cultural properties exist in the areas under consideration in this amendment, this topic has been dismissed from further analysis.

Sacred Sites

According to Executive Order 13007 on “Indian Sacred Sites” (1996), the National Park Service will accommodate, to the extent practicable, access to and ceremonial use of Indian sacred sites by religious practitioners from recognized American Indian and Alaska native tribes and avoid adversely affecting the physical integrity of such sacred sites.

There are no sacred sites within the boundaries of Wilson’s Creek National battlefield. Therefore, this topic has been dismissed from further consideration.

Geological Features and Soils

Actions described in this amendment would not affect geological features in the national battlefield. Actions described in this document could compact, excavate, displace, and disturb soils in construction areas and in areas of pedestrian or vehicle use. All areas proposed for construction have been previously disturbed, and the proposed construction activities would not involve blast excavation. Proposed revegetation would help stabilize soils and reduce erosion. Impacts to soils would be negligible to minor, adverse, and short term. Because there would be no effect on geological features and the effects on soils would be minor or less in degree, this topic has been dismissed from further analysis.

Lightscape Management

In accordance with its *Management Policies 2006*, the National Park Service will preserve, to the extent possible, natural lightscapes of

parks, which are natural resources and values that exist in the absence of human-caused light. The national battlefield strives to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements and ensures that all outdoor lighting is shielded to the maximum extent possible to keep light on the intended subject and out of the night sky. The proposed actions would not affect the existing exterior lighting of the visitor center, parking area, or the 20-acre site. There is no existing or proposed lighting at the 154-acre site. Therefore, lightscape management was dismissed as an impact topic.

Vegetation

Under the actions described in the alternatives, vegetation removal and/or disturbance would be kept to a minimum. Less than 2 acres would be affected by the removal of nonhistoric structures and other man-made elements from the southwest addition lands. Less than an acre would be affected by the construction of the addition to the visitor center. Less than an acre would be affected by the construction of a parking area near the southwest addition lands.

Disturbed areas would be revegetated and rehabilitated following construction, as appropriate; therefore, removal and/or disturbance of vegetation in the project areas is expected to result in negligible to minor adverse impacts on vegetation. Because these effects would be minor or less in degree, the topic of vegetation has been dismissed from further analysis.

Wildlife

There is minimal potential for habitat disturbance or alteration from actions proposed in the action alternatives. Large trees, bushes, and shrubbery would remain intact to the extent possible. Disturbed areas would be

revegetated and rehabilitated following construction. Therefore, the actions described in this amendment would have negligible to minor adverse impacts on wildlife. Because the effects to wildlife and wildlife habitat would be minor, this topic has been dismissed from further analysis.

Special Status Species

The Endangered Species Act of 1973 requires examination of impacts on all federally listed threatened, endangered, and candidate species. Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service (or designated representative) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. *NPS Management Policies 2006* state that the National Park Service will inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species to the greatest extent possible. In addition, the National Park Service will inventory other native species that are of special management concern to park units (such as rare, declining, sensitive, or unique species, and their habitats) and will manage them to maintain their natural distribution and abundance.

The Missouri bladderpod and the gray bat, two federally listed species that are protected under the Endangered Species Act and NPS management policies, inhabit the national battlefield. A small population (eight plants) of Missouri bladderpod (*Lesquerella filiformis*) was found on the southwest addition lands in May 2007. Four state-listed species inhabit the national battlefield as well, and these species are provided protection and conservation in ongoing resource management and rehabilitation programs.

Early consultation with the U.S. Fish and Wildlife Service indicates that none of the

BACKGROUND

actions under the alternatives would pose impacts on these federal and state-listed species or their habitats. No construction or other disturbance associated with the alternative would occur in areas where these species are found. Therefore, the topic of special status species is dismissed from further analysis.

Water Quality and Water Quantity

Moody Springs is an important component of both the natural and cultural landscapes of Wilson's Creek National Battlefield and provides habitat for numerous animal and insect species as well as plant life. This spring is in the southern portion of the southwest addition lands, near the national battlefield boundary.

This amendment poses no construction or other development near Moody Springs. The spring and the area around it would be included in the resource protection prescription, affording the spring the highest possible level of protection. No actions are proposed that would have any effect on water flows from the spring.

In summary, the actions proposed in this amendment would have no effects on water quality or water quantity from construction activities, placement of permanent structures, and increased or continued pedestrian use from the public and NPS staff. Because actions proposed are not anticipated to have any effect on water resources, this topic has been dismissed from further consideration.

Wetlands

Portions of the area around Moody Springs include wetlands. The zoning for Moody Springs and adjoining lands does not allow construction and limits visitor use activities, and no construction or development is proposed in this area. Therefore, no wetland

impacts are anticipated, and a statement of findings for wetlands will not be prepared. For these reasons, the topic of wetlands has been dismissed from further consideration.

Soundscape Management

In accordance with NPS *Management Policies 2006* and Director's Order #47, "Sound Preservation and Noise Management," an important part of the NPS mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound and are the aggregate of all the natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds.

Despite the substantial growth of the Springfield metropolitan area during the last decade, the current soundscape at Wilson's Creek National Battlefield consists mainly of natural sounds, without the interference of too much man-made noise. Natural sounds that can be heard at the national battlefield include wind in the trees and sounds related to wildlife, such as those sounds made by birds, coyotes, frogs, and crickets.

The natural soundscape is important to the reflective qualities associated with appreciation of the battlefield.

Construction activities would have temporary, minor and localized adverse impacts on the natural soundscape. Therefore, the topic of natural soundscape management was dismissed from further consideration.

Socioeconomics

The proposed action would neither change local and regional land use nor appreciably impact local businesses or other agencies. Implementation of the proposed action could provide a negligible beneficial impact to the economy of nearby Springfield, as well as

Greene and Christian counties (e.g., minimal increases in employment opportunities for the construction workforce and revenues for local businesses and government generated from construction activities and workers). Any increase, however, would be temporary and negligible, lasting only as long as construction.

Prime and Unique Farmlands

Prime or unique farmlands are defined as soils particularly suited for growing general or specialty crops. Prime farmland produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. The national battlefield is in the uplands of the Ozark Plateau. According to Natural Resources Conservation Service, the soils and farmlands of this region do not qualify as prime or unique. Therefore, the topic of prime and unique farmlands has been dismissed from further consideration.

Environmental Justice

Presidential Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the Environmental Protection Agency, environmental justice is the

fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should

bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

The goal of fair treatment is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

The communities surrounding Wilson's Creek National Battlefield contain both minority and low-income populations; however, environmental justice is dismissed as an impact topic for the following reasons:

- NPS staff and the planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the preferred alternative would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect adverse effects on any minority or low-income population.
- The impacts associated with implementation of the preferred alternative would not disproportionately affect any minority or low-income population or community.
- Implementation of the preferred alternative would not result in any identified effects that would be specific to any minority or low-income community.
- The impacts to the socioeconomic environment resulting from implementation of any of the action alternatives would be beneficial. In addition, NPS and the planning team do not anticipate the impacts on the socioeconomic environment to alter

BACKGROUND

the physical and social structure of the nearby communities.

that would result from a federal action must be explicitly addressed in environmental documents.

Indian Trust Resources

Indian trust resources include tribal lands, assets, resources, and treaty rights. Any anticipated impacts to Indian trust resources

There are no Indian trust resources within the boundaries of Wilson's Creek National battlefield. Therefore, this topic has been dismissed from further consideration.

**ALTERNATIVES,
INCLUDING
THE PREFERRED
ALTERNATIVE**



INTRODUCTION AND MANAGEMENT PRESCRIPTIONS

This chapter describes the management prescriptions that identify how the additional areas would be managed and describes the three alternatives developed for resource protection and visitor experience at the national battlefield. All of the alternatives in this environmental assessment are consistent with the NPS mission to conserve natural and cultural resources for the enjoyment of future generations.

MANAGEMENT PRESCRIPTIONS

Management prescriptions identify how different areas in the national battlefield would be managed to achieve a combination of desired resource conditions and visitor experiences under each alternative. The management prescriptions designed for Wilson's Creek National Battlefield in the 2003 *General Management Plan* are described below in terms of visitor experience, resources conditions, and appropriate activities or facilities.

Visitor Services and Administration

This area would provide support functions for carrying out the national battlefield's mission and objectives, such as orientation, introductory education and interpretive programs, and staff and administrative operations.

Visitor Experience. Visitors would make their initial national battlefield contacts in this area. They would receive information and orientation and picnic areas and parking would be available. Visitors usually would gain their first understanding of the history of Wilson's Creek in this area through the film and museum exhibits. Space for some passive recreational activities such as walking and picnicking would be provided.

Resource Condition. The important resources in this area would be contained and protected within the research library, the archival or curatorial storage, or in exhibits that provide greater visitor understanding of the events and meanings of the Battle of Wilson's Creek. No other significant cultural or natural resources would be found in this area. If previously unknown resources, such as archeological sites, were discovered in this area, zoning would be re-evaluated to implement appropriate management actions.

Appropriate Activities or Facilities. Passive recreational activities such as walking and picnicking could occur in this area. New facility development, such as additional access points, parking, or equestrian staging, would be located here. Other facilities could include national battlefield entrance and parking areas, administrative offices, visitor center, research library, and maintenance areas.

Battlefield Landscape Enhancement

Management in this area would focus on retaining and enhancing the general historic character of the battlefield landscape. This would provide visitors with an insight into the general conditions that the combatants encountered on August 10, 1861, and would facilitate the visitor's understanding of the dynamic course of this bitter battle. Vegetative changes since the time of the battle obscure the views that existed on that day and detract from the visitor's ability to read the landscape and appreciate the way that landforms, topography, and cultural features influenced the battle's evolution and eventual outcome. Clearing of weedy, woody, vegetative growth, maintenance of historic open fields, and reestablishment of tall grass prairie, open timber communities, and other elements of the 19th century vegetation that characterized the battlefield would help enhance the

integrity of the historic setting. These actions would be guided by the NPS *Management Policies 2006*, the 1996 *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, the recommended landscape treatments described in the "Cultural Landscape Report for Wilson's Creek National Battlefield," (NPS 2005) and the national battlefield's vegetation management plan.

Visitor Experience. Visitors in this area would experience the physical environment and ambience of Wilson's Creek Battlefield as it was known in 1861. Guided and self-guided tours would allow visitors to experience the national battlefield for themselves, while learning about the national battlefield's important resources. Visitors would find opportunities for quiet contemplation of the meaning of the Battle of Wilson's Creek and the sacrifices of the men who fought there. There would be a low probability of encountering NPS staff, and low to medium probability of encountering other visitors. Passive recreational uses would be allowed here; however, recreational users would be informed that uses must be compatible with resource protection and management.

Resource Condition. NPS management would work to return the battlefield landscape to its 1861 appearance to as great a degree as feasible. This landscape featured oak savannah, limestone glades, matured woodlands, and cultivated fields. These features help define the historical landscape; cultivated fields constitute cultural resources in their own right. Natural resource management would be integrated in an overall program of cultural resource management of the historical landscape. Should previously unknown threatened or endangered species be found, those areas would become part of the Resource Preservation prescription.

Appropriate Activities or Facilities.

Recreational activities such as horseback riding, running, and hiking might be appro-

priate here. NPS staff would manage these areas to ensure that they were compatible with efforts to rehabilitate resources and habitat. Minimal development, including interpretive displays and trails following the alignment of historical traces, could occur in this area.

Resource Preservation

This area would provide a high level of protection for highly sensitive and vulnerable cultural or natural areas and resources.

Visitor Experience. Visitor use in these areas would be limited. Recreational activity would be limited to walking and hiking. Interpretive media would be developed to inform visitors of the special and fragile nature of this area and the need to tread lightly. There would be a moderate possibility of encountering NPS staff in this area and a low probability of encountering other visitors. Resource preservation would take precedence over visitor use in this area.

Resource Condition. This area would include highly sensitive cultural and natural resources. Resource preservation would be the highest priority for NPS management in this area. Resource protection measures consistent with NPS policy would be applied. Natural resource management would take precedence over cultural resource management in those areas containing threatened or endangered species.

Appropriate Activities or Facilities.

Appropriate activities in this area would be limited to research and passive recreational uses such as hiking. Habitat restoration for threatened and endangered species would be a priority. Interpretive programs and exhibits would provide information and interpret ongoing research activities. No other facility development would occur in this area.

Landscape Maintenance

This area would include those parts of the national battlefield that do not contain highly sensitive resources and are not high priorities for battlefield landscape enhancement. NPS management would focus on the control of exotic plants, trail maintenance, maintaining vegetation to screen outside visual and auditory intrusions, and other general maintenance activities. Potential exists for additional trails in this area.

Visitor Experience. Visitors in this area would have the opportunity to experience the rural character of the battlefield. Visitors here could expect a low probability of encountering NPS staff and a low to medium probability of encountering other visitors. Visitors could engage in recreational activities such as horseback riding, hiking, or running.

Resource Condition. This area would not contain the most significant cultural or natural resources. As part of the battlefield, however,

this area is an important component of the cultural landscape. NPS management would maintain the overall landscape appearance by controlling growth of exotic plant species and screening exterior visual and auditory intrusions. Management of the landscape in this area would enhance the ambience of the other management areas.

Appropriate Activities or Facilities. This area would allow a range of both passive and nonpassive recreational activities, including hiking, running, and horseback riding, so long as these activities did not pose an adverse visual or auditory impact on visitors in other management areas. Facility development would be limited to interpretive displays designed for recreational users and trail users and to identify the location of visitor comfort stations.

FORMULATION OF THE ALTERNATIVES

A planning team composed of professionals from the NPS Denver Service Center, NPS Midwest Regional Office, and Wilson's Creek National Battlefield developed preliminary alternative concepts in a two-day workshop at the national battlefield in October 2006. These concepts were submitted to the public in a newsletter in December 2006. Public comments on the preliminary alternatives were considered in the formulation of the alternatives for this amendment, as was input from NPS staff. The management alternatives pre-

sented in this document are consistent with the objectives and management directions of the 2003 *General Management Plan*.

The alternatives describe overall management concepts and the alternative ways in which the management prescriptions would be applied to the lands added to the national battlefield. In March 2007, the planning team conducted a Choosing by Advantages workshop to select a preferred alternative. Alternative B is the National Park Service's preferred alternative.

ALTERNATIVE A — NO-ACTION ALTERNATIVE

Under this alternative, the visitor experience would continue to be split between the Civil War Museum and the main unit. Management would continue the current operation of the Civil War Museum at its current location. The Civil War Museum collections would remain in this facility. Museum collections would continue to be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines.

NPS administrative functions would remain in their current locations at the visitor center. Staff of the Midwest Region Inventory and Monitoring program would remain in the trailers in the main unit.

The southwest addition lands would remain closed to visitors. No access would be developed from the main unit to the new lands. The structures on the site would remain in their current locations. The residence would remain vacant. The garage would continue to be used as storage.

There would be no additional staffing requirements under this alternative beyond the recommended staffing levels in the *Wilson's Creek National Battlefield Business Plan* (2005). See the appendix for the cost estimates for implementing this alternative.



NORTH

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ALTERNATIVE B — RELOCATE THE CIVIL WAR MUSEUM COLLECTIONS INTO AN ADDITION TO THE VISITOR CENTER (PREFERRED ALTERNATIVE)

Under this alternative, the Civil War Museum would be closed and the collections would be moved into a new curatorial and exhibit facility that would be added to the visitor center. The visitor experience would be consolidated at the main unit. In addition to experiencing the battlefield, visitors would have an opportunity to understand the significance of the battle as well as its context in the Civil War in the Trans-Mississippi West through a new museum with new exhibits that would merge the stories presented in the Civil War Museum with those in the rest of the national battlefield.

Most NPS operations would remain at the main unit. Staff of the Inventory and Monitoring program would move into adaptively reused space in the former Civil War Museum building. The garage at the 20-acre site would be used for storage. The house on the 20-acre site would be sold and moved by the new owner to a location outside the national battlefield or architectural elements and building materials would be salvaged and sold and the remainder of the building demolished. In either case, the house site and other elements of the battlefield landscape at the 20-acre site would be preserved and rehabilitated.

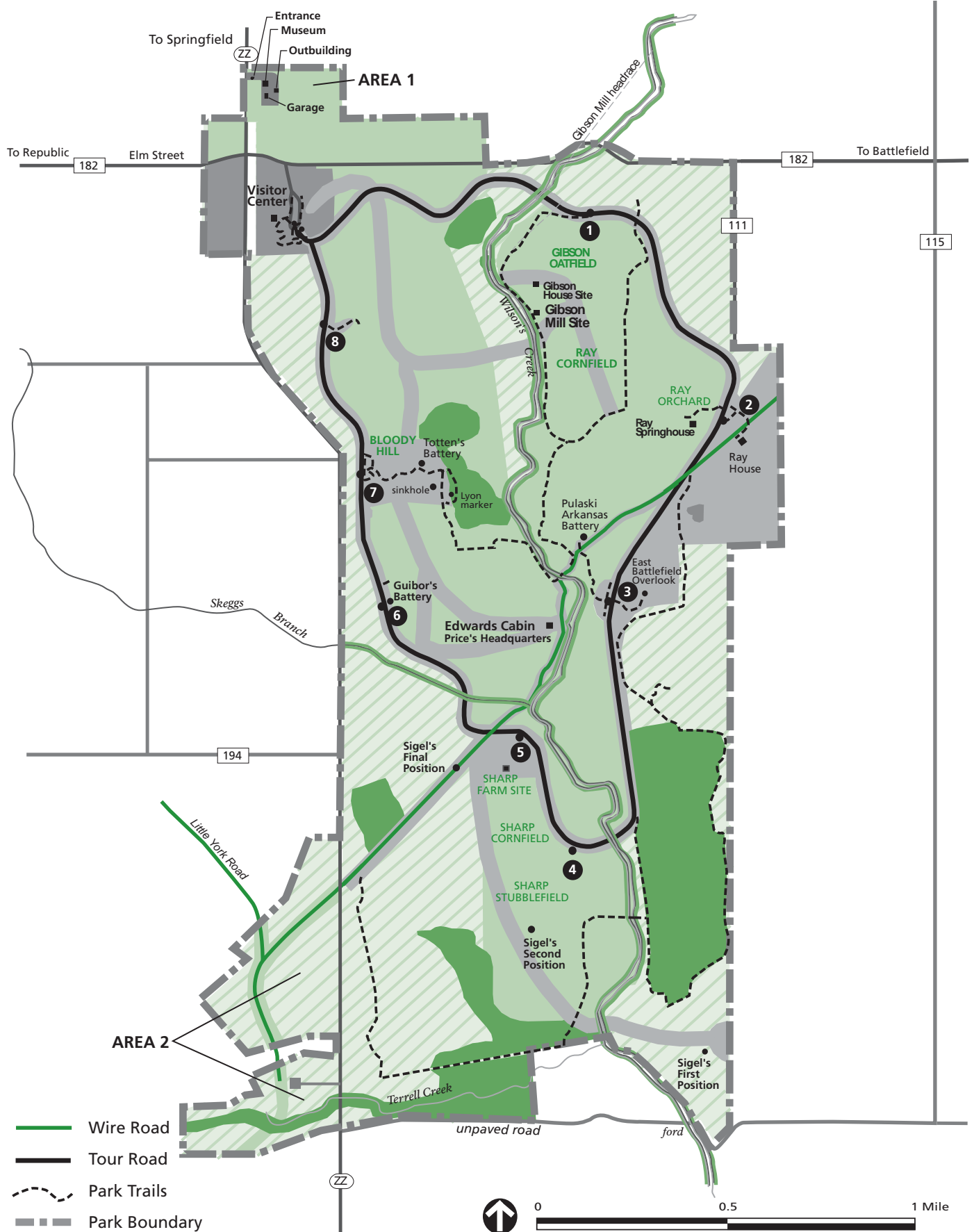
Museum collections would continue to be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines. The museum collections,

employees, and visitors would be protected by a fire suppression and alarm system.

Nonhistoric structures on the southwest addition lands, including the house, pump house, concrete slabs, electrical service and other utilities, would be removed, and elements of the battlefield landscape would be enhanced or restored, consistent with the actions described in the management areas described above. Some pedestrian trails would be established in this area. The Wire Road would be open for pedestrian use. Sensitive natural and cultural resources in this area would be protected.

This alternative would enable the removal of some assets from NPS inventory, including the two trailers currently used by the Inventory and Monitoring program staff, the house on the 20-acre site, and the nonhistoric structures in the southwest addition lands.

There would be no additional staffing requirements under this alternative beyond the recommended staffing levels in the *Wilson's Creek National Battlefield Business Plan*. See the appendix for the cost estimates for implementing this alternative.



Alternative B Preferred Alternative

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ALTERNATIVE C — MOVE THE CIVIL WAR MUSEUM COLLECTIONS INTO ADAPTIVELY REUSED SPACE IN THE VISITOR CENTER

Under this alternative, the Civil War Museum would be closed and the museum collections would be moved into space in the existing visitor center. This space would be rehabilitated for curatorial storage and exhibit space. As in alternative B, in addition to experiencing the battlefield, visitors would have an opportunity to understand the significance of the battle as well as its context in the Civil War in the Trans-Mississippi West through a new museum that would merge the present exhibits in the visitor center and the Civil War Museum.

Most NPS administrative operations would move to the structures on the 20-acre site. The house would be rehabilitated as the new NPS headquarters/ administrative center and educational/training facility. The Inventory and Monitoring program staff would move into adaptively reused space in the former Civil War Museum building. The garage at the 20-acre site would be used for storage. Elements of the historic landscape would be preserved but not rehabilitated.

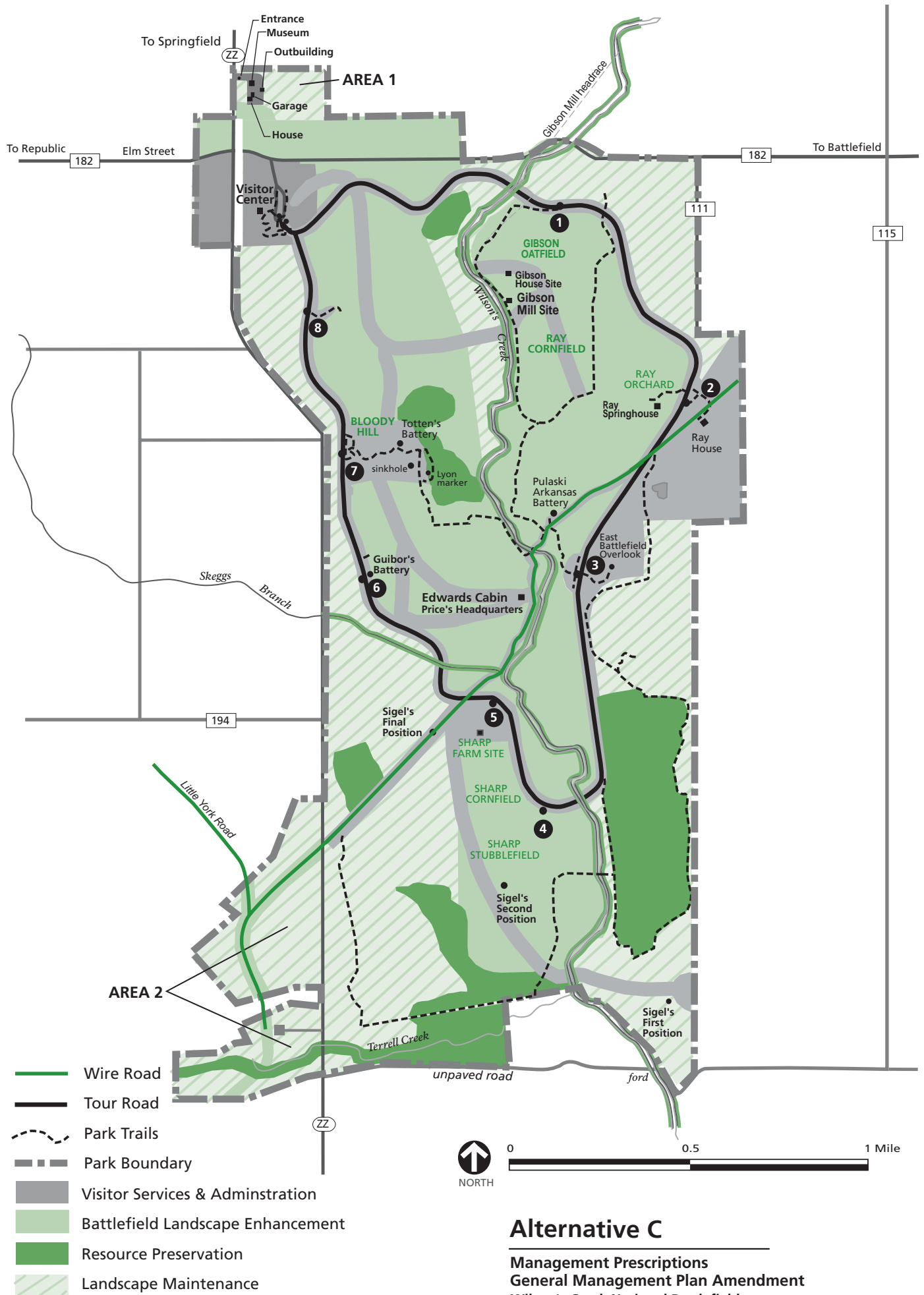
Museum collections would continue to be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines. The museum collections,

employees, and visitors would be protected by a fire suppression and alarm system.

Nonhistoric structures on the southwest addition lands would be removed, and elements of the battlefield landscape would be enhanced, consistent with the actions described in the management areas described above. Some pedestrian trails would be established in this area. The Wire Road would be open for pedestrian use. Sensitive natural and cultural resources in this area would be protected.

This alternative would enable the removal of some assets from the NPS inventory, including the two trailers currently used by the Inventory and Monitoring program staff, the house on the 20-acre site, and the non-historic structures in the southwest addition lands.

There would be no additional staffing requirements under this alternative beyond the recommended staffing levels in the *Wilson's Creek National Battlefield Business Plan*. See the appendix for the cost estimates for implementing this alternative.



Alternative C

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MITIGATION

Under all alternatives, NPS staff would mitigate impacts arising from increases in visitation and increased suburban development and traffic outside the national battlefield boundaries.

NPS management would restrict visitors in all instances where such use appears to adversely affect resources or conflicts with the national battlefield's purpose and significance. Archeological monitoring and subsurface investigations, where necessary, would be conducted to ensure that development and construction of new facilities does not affect the national battlefield's significant archeological resources. Every effort would be made to avoid known archeological sites. NPS staff would work with archival professionals from local universities and museums, as necessary, to refine the methods for management and use of the national battlefield's museum collections.

Management of exotic species would be used to restore the battlefield's landscape to its 1861 condition; this includes the restoration of native plant habitat. Cultivation of native species and the management of exotic species could provide screening from outside visual and auditory intrusions from development outside national battlefield boundaries. These measures would both contribute to effective cultural and natural resource preservation and enhance the visitor experience.

NPS staff would work with other land management agencies whenever possible to manage the entire set of resources and ecosystems that encompass and affect Wilson's Creek National Battlefield.

NPS staff would apply ecological principles to ensure that natural resources were maintained and not impaired. The staff would continue to inventory and monitor the natural resources to avoid or minimize impacts resulting from

future development. They would use fire and other techniques, such as mechanical processes, to maintain and/or restore ecosystem integrity and use integrated pest management procedures when necessary to control nonnative organisms or other pests. Habitats for threatened and endangered species would also be conserved and restored if they were found.

NPS Management Policies (2006), state that the National Park Service has an obligation to promote leadership in environmental stewardship. The National Park Service must set an example not only for visitors, other governmental agencies, the private sector, and the public at large, but also for a worldwide audience. Environmental leadership will be demonstrated in all aspects of NPS planning, operations, and facilities, design, construction, and management.

Accordingly, Wilson's Creek National Battlefield will implement sustainable practices in the planning, design, construction, and operation of all NPS facilities to minimize adverse impacts on natural and cultural resources. Existing facilities would be retrofitted and new facilities designed to meet Leadership in Energy and Environmental Design (LEED) standards to demonstrate the NPS commitment to protect our natural and cultural resources for future generations. The design and development of museum spaces would strive to meet the Association of American Museums standards.

NPS staff would apply mitigation techniques to minimize the impacts of construction and other activities on national battlefield resources. To prevent soil erosion that degrades water quality, best management practices such as thorough design analysis, the use of soil retention structures, and prompt revegetation would be applied to all disturbed sites associated with construction activities.

NPS managers would continue to regularly update the national battlefield's resource management plan to prioritize actions needed to protect, manage, and study the resources. Areas used by visitors would be monitored for signs of native vegetation disturbance, trampling, trail erosion, or the development of social trails.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed in Section 101 of the National Environmental Policy Act. Ordinarily, this means the alternative that would cause the least damage to the biological and physical environment; it also means the alternative that would best protect, preserve, and enhance historic, cultural, and natural resources. Three of the six criteria listed in the act for determining the environmentally preferred alternative are particularly relevant to actions described in this environmental assessment/assessment of effect:

- fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other

undesirable and unintended consequences;

- preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice.

In the process used to identify the preferred alternative, alternatives B and C were found to be essentially equivalent in providing the best overall potential for protecting and preserving the historic, cultural, and natural resources of Wilson's Creek National Battlefield. Alternatives B and C provide the same range of visitor experiences that do not pose a conflict with the national battlefield's legislated mandate to commemorate the Battle of Wilson's Creek. The actions under alternatives B and C would preserve important historic, cultural, and natural aspects associated with the Battle of Wilson's Creek.



Ray House 1880s



Ray House today



Artillery emplacement



Fall and the Wire Road



Wilson's Creek tour road

TABLE 1. MANAGEMENT PRESCRIPTIONS AND ALTERNATIVES FOR THE BOUNDARY ADDITION LANDS

Management Prescriptions	Alternative A — No Action Continuation of Existing Conditions	Alternative B — Relocate the Civil War Museum Collections into an Addition to the Visitor Center (Preferred Alternative)	Acreage in Prescription	Alternative C — Move the Civil War Museum Collections into Existing Administrative Space in the Visitor Center	Acreage in Prescription
	<p>These areas were not under NPS management and thus had no management prescriptions.</p> <p>The Civil War Museum would remain in its current location.</p> <p>The visitor experience would remain split between the Civil War Museum and the visitor center in the main unit.</p> <p>NPS staff time would be split between the main unit and the Civil War Museum.</p> <p>NPS administrative functions would remain at the main unit.</p> <p>The Inventory and Monitoring program staff would remain in the trailers at the main unit.</p> <p>The house on the 20-acre site would remain vacant.</p> <p>The existing mowing and vegetation patterns at the 20-acre site would be maintained.</p> <p>Nonhistoric structures would remain in the southwest addition lands.</p> <p>Visitor access to sensitive sites would be controlled.</p>				
VISITOR SERVICES AND ADMINISTRATION		<p>Move the Civil War museum collections into a new addition to the visitor center.</p> <p>Keep most NPS administrative functions at the main unit.</p> <p>Move the Inventory and Monitoring program staff to the rehabilitated Civil War Museum building on the 20-acre site.</p> <p>Remove the trailers at the main unit.</p> <p>Sell and/or move the house from the 20-acre site.</p>	6 acres	<p>Same as alternative B except:</p> <p>Move the Civil War Museum collections into rehabilitated space within the existing visitor center.</p> <p>Move most NPS administrative functions to the 20-acre site.</p> <p>Adaptively reuse the house at the 20-acre site as the NPS headquarters and education center.</p>	6 acres
BATTLEFIELD LANDSCAPE ENHANCEMENT		<p>Retain and enhance the general appearance of the battlefield landscape.</p> <p>Open the Wire Road in the southwest addition lands for pedestrian use.</p>	30 acres	Same as alternative B except less land would be in this prescription at the 20-acre site.	20 acres
RESOURCE PRESERVATION		<p>Accommodate limited visitor access where compatible with national battlefield and resource protection purposes.</p> <p>Protect Moody Spring and other sensitive natural and cultural resource sites.</p>	30 acres	Same as alternative B.	30 acres
LANDSCAPE MAINTENANCE		<p>Manage invasive species.</p> <p>Screen visual and auditory intrusions.</p> <p>Allow limited potential for trail development.</p>	108 acres	Same as alternative B except more land would be in this prescription at the 20-acre site.	118 acres

TABLE 2. SUMMARY OF IMPACTS

There would be no impairment of the national battlefield's resources and values from the impacts described below.

IMPACT TOPIC	ALTERNATIVE A — No Action	ALTERNATIVE B — PREFERRED — Relocate the Civil War Museum Collections into an Addition to the Visitor Center	ALTERNATIVE C — Move the Civil War Museum Collections into Existing Administrative Space in the Visitor Center
MUSEUM COLLECTIONS	<p>The no-action alternative would continue to have a negligible to moderate, long-term, adverse impact on the museum collections resulting from inadequate storage and the potential for theft, vandalism, accidental damage, or fire.</p> <p>The no-action alternative would continue to contribute a negligible long-term, adverse component to the long-term, moderate, beneficial cumulative impacts on the collections in the region. This alternative's contribution would be a relatively small component of the overall cumulative impact.</p>	<p>The preferred alternative would have a moderate, long-term, beneficial impact on the museum collections by providing adequate display, storage, and protection from theft, vandalism, accidental damage, and fire.</p> <p>The preferred alternative would contribute a minor to moderate, long-term, beneficial component to the overall long-term, moderate, beneficial cumulative impacts on museum collections in the region. This alternative's contribution would be a small part of the overall cumulative impact.</p>	Same as alternative B.

IMPACT TOPIC	ALTERNATIVE A — No Action	ALTERNATIVE B — PREFERRED — Relocate the Civil War Museum Collections into an Addition to the Visitor Center	ALTERNATIVE C — Move the Civil War Museum Collections into Existing Administrative Space in the Visitor Center
CULTURAL LANDSCAPES	<p>Maintaining mowing and vegetation patterns at the 20-acre site of the Civil War Museum and existing landscape conditions and nonhistoric structures on the southwest addition lands would continue to have a long-term, negligible, adverse impact on the national battlefield's cultural landscapes.</p> <p>Acquisition of the two addition areas as a result of the boundary adjustment provides some protection from modern development. Maintenance of the landscapes would provide minimal screening from modern visual and auditory intrusions. These conditions would continue to result in long-term, negligible, beneficial impacts.</p> <p>The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be relatively small part of the overall cumulative impacts.</p>	<p>The preferred alternative would have minor to moderate, long-term, beneficial impacts on circulation, views and vistas, and vegetation associated with the national battlefield's cultural landscapes.</p> <p>Acquisition of the two addition areas as a result of the boundary adjustment would provide some protection from modern development. The application of management techniques described in the Battlefield Landscape Enhancement and Landscape Maintenance prescriptions would provide protection from modern development and screening from modern visual and auditory intrusions.</p> <p>The preferred alternative would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impact.</p>	<p>Alternative C would have minor, long-term, beneficial impacts on the circulation, views and vistas, and vegetation associated with the national battlefields' cultural landscapes.</p> <p>Acquisition of the two addition areas as a result of the boundary adjustment and the application of management techniques described in the Landscape Maintenance prescription would provide screening from modern visual and auditory intrusions.</p> <p>Alternative C would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impacts.</p>

Table 2: Summary of Impacts

IMPACT TOPIC	ALTERNATIVE A — No Action	ALTERNATIVE B — PREFERRED — Relocate the Civil War Museum Collections into an Addition to the Visitor Center	ALTERNATIVE C — Move the Civil War Museum Collections into Existing Administrative Space in the Visitor Center
VISITOR USE AND EXPERIENCE	<p>The no-action alternative would continue to have a minor, long-term, adverse impact on visitor use at the national battlefield.</p> <p>The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a relatively small component of the overall cumulative impacts.</p>	<p>The preferred alternative would have a moderate, long-term, beneficial impact on visitor use and experience at the national battlefield.</p> <p>The preferred alternative would contribute a minor, long-term beneficial component to the overall cumulative long-term, moderate beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a small part of the overall cumulative impacts.</p>	Same as alternative B.
NPS OPERATIONS	<p>The no-action alternative would continue to have a minor, long-term, adverse effect on NPS operations.</p> <p>The no-action alternative would contribute a minor, long-term adverse component to cumulative minor to moderate, beneficial impacts on NPS operations. This alternative's contribution would be a modest part of the overall cumulative impact.</p>	<p>The preferred alternative would have a minor to moderate, long-term, beneficial effect on NPS operations.</p> <p>The preferred alternative would contribute a minor, long-term beneficial component to cumulative minor to moderate, beneficial impacts on operations. This contribution would be a modest part of the overall cumulative impact.</p>	<p>Alternative C would have a minor, long-term, beneficial effect on NPS operations.</p> <p>Alternative C would contribute a minor, long-term beneficial component to cumulative minor to moderate, beneficial impacts on operations. This contribution would be a small to modest part of the overall cumulative impact.</p>

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES



INTRODUCTION

The National Environmental Policy Act requires that environmental documents disclose the environmental impacts of all the reasonable alternatives and any adverse environmental effects that cannot be avoided should an alternative be implemented. This chapter analyzes the environmental impacts of the three alternatives, including the no-action alternative, on the museum collections, the cultural landscape, visitor use and experience, and NPS operations. These analyses provide the basis for comparing the effects of the alternatives.

METHODOLOGY FOR ASSESSING IMPACTS

Potential impacts (direct, indirect, and cumulative effects) are described in terms of type, context (are the effects site-specific, local, or even regional?), duration (are the effects short term, long term, or permanent?) and intensity (is the degree or severity of effects negligible, minor, moderate, or major?). Because definitions of intensity (negligible, minor, moderate, or major) vary by impact topic, intensity definitions are provided separately for each impact topic analyzed in this environmental assessment.

IMPACTS TO CULTURAL RESOURCES AND SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT

In this environmental assessment impacts on cultural resources are described in terms of type, context, duration, and intensity, which is consistent with the regulations of the Council on Environmental Quality (CEQ) that implement the National Environmental Policy Act. These impact analyses are intended, however, to comply with the requirements of both the National Environmental Policy Act and Section 106 of the National Historic

Preservation Act. In accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106 (36 CFR Part 800, *Protection of Historic Properties*), impacts on cultural resources were also identified and evaluated by (1) determining the area of potential effects; (2) identifying cultural resources present in the area of potential effects that are either listed in or eligible to be listed in the National Register of Historic Places; (3) applying the criteria of adverse effect to affected national register eligible or listed cultural resources; and (4) considering ways to avoid, minimize, or mitigate adverse effects.

Under the advisory council's regulations, a determination of either *adverse effect* or *no adverse effect* must also be made for affected national register listed or eligible cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the national register, e.g., diminishing the integrity (or the extent to which a resource retains its historic appearance) of its location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternatives that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5, *Assessment of Adverse Effects*). A determination of *no adverse effect* means there is an effect but the effect would not diminish the characteristics of the cultural resource that qualify it for inclusion in the national register.

CEQ regulations and the National Park Service's *Conservation Planning, Environmental Impact Analysis and Decision Making* (Director's Order #12) also call for a discussion of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact, e.g., reducing the intensity of an impact from

major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation only under the National Environmental Policy Act. It does not suggest that the level of effect as defined by Section 106 is similarly reduced. Cultural resources are nonrenewable resources, and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss in the integrity of the resource that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 may be mitigated, the effect remains adverse.

A Section 106 summary is included, as appropriate, in the impact analysis sections. The Section 106 summary is **an assessment of the effect of the undertaking (implementation of the alternative) on national register eligible or listed cultural resources only**, based upon the criterion of effect and criteria of adverse effect found in the advisory council's regulations.

DURATION

Duration refers to the time period during which the effects of an impact persist. For impact topics evaluated in this document, the duration of impacts across all categories were determined using the following definitions:

short term — the impact lasts less than one year

long term — the impact lasts one year or longer

CUMULATIVE IMPACT ANALYSIS

Cumulative impacts are impacts on the environment that result from the incremental (i.e., additive) impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what

entity (federal or nonfederal) undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place during a period of time.

Cumulative impacts analyzed in this document consider the incremental effects of the no-action alternative and each of the action alternatives in conjunction with past, current, and future actions at Wilson's Creek National Battlefield. These actions include the following planned or ongoing activities:

- Ongoing interpretive and educational efforts are occurring at Pea Ridge National Military Park (Arkansas); Fort Scott National Historic Site (Kansas); General Sweeney's Museum of Civil War History (Missouri); the History Museum of Springfield/Greene County; Mine Creek State Historic Site (Kansas); and Prairie Grove Battlefield State Park (Arkansas)— All of these sites are linked thematically with Wilson's Creek National Battlefield.
- Highway 60 currently passes directly through the city of Republic. The construction of the U.S. Highway 60 Bypass could reroute the highway so that it passes nearer to Wilson's Creek National Battlefield and could result in visual and noise intrusions for visitors in the national battlefield.
- County Roads M and MM, which are located north of Wilson's Creek National Battlefield and connect Interstate 44 with County Road ZZ will potentially be widened. County Road ZZ runs north-south and delineates most of the western edge of the national battlefield and could result in visual and noise intrusions for visitors in the national battlefield.
- The new high school for the City of Republic will be constructed 1.5 miles north of the national battlefield on County Road ZZ in 2009. This will result in additional road construction and commercial and residential development in the area near the national battlefield.

- Increased conversion of agricultural land to residential development in areas surrounding the national battlefield could result in visual and noise intrusions for visitors in the national battlefield.

POTENTIAL FOR IMPAIRMENT OF NATIONAL BATTLEFIELD RESOURCES AND VALUES

In determining whether impairment may occur, NPS managers consider the duration, severity, and magnitude of the impact; the resources and values affected; and direct, indirect, and cumulative effects of the action. According to NPS policy, "An impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is: (a) necessary to fulfill

specific purposes identified in the establishing legislation or proclamation of the park; (b) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (c) identified as a goal in the park's general management plan or other relevant NPS planning documents."

This policy does not prohibit impacts to park resources and values. The National Park Service has the discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, so long as the impacts do not constitute impairment. Moreover, an impact is less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values.

MUSEUM COLLECTIONS

AFFECTED ENVIRONMENT

The Wilson's Creek National Battlefield's Civil War Museum has the nation's largest archival and materials collections related to the Civil War in the Trans-Mississippi West. The outstanding collection of over 15,000 artifacts includes the sword belt and sash of Arkansas General Patrick Cleburne and the flag of the Confederate "Cherokee Braves."

The main national battlefield museum collections contain approximately 40,000 artifacts related to the battle and the war in the Trans-Mississippi region. These include one-of-a-kind pieces related to the battle, such as General Lyon's presentation sword and scabbard, the Lyon bed, and the counterpane used to cover Lyon's body. The main battlefield archival collections contain more than 4,000 volumes and extensive primary documentation.

INTENSITY DEFINITIONS

The museum collections (prehistoric and historic objects, artifacts and works of art, archival documents, and natural history specimens) are generally ineligible for listing in the national register. As such, Section 106 determinations of effect are not provided. The following are the definitions for intensity levels for impacts on the museum collections in this document.

Negligible: Impact is at the lowest levels of detection — barely measurable with no perceptible consequences, either adverse or beneficial, to museum collections.

Minor: Adverse impact — Impact would affect the integrity of few items in the museum collections but would not degrade the usefulness of the collections for future research and interpretation.

Moderate: Adverse impact — Impact would affect the integrity of many items in the museum collections and diminish the usefulness of the collections for future research and interpretation.

Major: Adverse impact — Impact would affect the integrity of most items in the museum collections and destroy the usefulness of the collections for future research and interpretation.

IMPACTS ON MUSEUM COLLECTIONS

Alternative A — No Action

Under the no-action alternative, maintaining the museum collections in the current Civil War Museum would continue to result in a short-term, negligible, adverse impact resulting from incremental deterioration of the collections. However, maintaining the collections in this facility permanently increases the potential for loss of all or part of the collections due to theft, vandalism, accidental damage, or fire. The museum collections currently are not adequately stored and protected. The facilities at the museum are inadequate for researchers who may wish to use the archival collections. Fire protection systems in the building are inadequate to protect the collections from a major fire. Similarly, the building is vulnerable to theft due to its remote location and the nature of the structure itself. These conditions could result in long-term, negligible to moderate adverse impacts.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have affected and potentially would continue to affect museum collections in the region as described in the "Cumulative Impact Analysis" section earlier in this chapter. Several museum and historical sites have accumulated archival collections containing

information relevant to the Civil War. These facilities include several national and state battlefields and historic sites (e.g., Fort Scott National Historic Site in Kansas and Prairie Grove Battlefield State Park in Arkansas) and local museums. This has resulted in a long-term, moderate, beneficial impact on collections at these other museums and historical sites.

The no-action alternative would continue to contribute a negligible long-term, adverse component to the overall long-term, moderate, beneficial cumulative impacts on the collections in the region because the national battlefield's collections are not adequately stored or protected from a fire, theft, accidental damage, or vandalism. This alternative's contribution would be a relatively small component of the overall cumulative impact.

Conclusion. The no-action alternative would continue to have a negligible to moderate, long-term, adverse impact on the museum collections resulting from inadequate storage and the potential for theft, vandalism, accidental damage, or fire.

The no-action alternative would continue to contribute a negligible long-term, adverse component to the long-term, moderate, beneficial cumulative impacts on the collections in the region because the national battlefield's collections are not adequately stored or protected from a fire, theft, accidental damage, or vandalism. This alternative's contribution would be a relatively small component of the overall cumulative impact.

The impacts on the museum collections under this alternative would not constitute impairment of the national battlefield's resources and values.

Alternative B —Preferred Alternative

Under the preferred alternative, the National Park Service would construct an addition to the visitor center appropriately designed for storage and research for the museum collections. The museum collections would thus be housed in a state-of-the-art facility and the collections would be accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines. These conditions would also enhance protection of the collections from theft, vandalism, accidental damage, and fire. This would result in long-term, moderate, beneficial impacts on the museum collections.

Cumulative Impacts. Past, present, and reasonably foreseeable future actions have affected and potentially would continue to affect museum collections in the region as described in the "Cumulative Impact Analysis" section earlier in this chapter. Several museum and historical sites have accumulated collections containing information relevant to the Civil War. These facilities include several national and state battlefields and historic sites (e.g., Fort Scott National Historic Site in Kansas and Prairie Grove Battlefield State Park in Arkansas) and local museums. This has resulted in a long-term, moderate, beneficial impact on collections at these other museums and historical sites.

The preferred alternative would contribute a minor to moderate, long-term, beneficial component to the overall long-term, moderate beneficial cumulative impacts on museum collections in the region because the national battlefield's collections would be adequately stored and protected. This alternative's contribution would be a small part of the overall cumulative impact.

Conclusion. The preferred alternative would have a moderate, long-term, beneficial impact on the museum collections by providing

adequate display, storage, and protection from theft, vandalism, accidental damage, and fire.

The preferred alternative would contribute a minor to moderate, long-term, beneficial component to the overall long-term, moderate, beneficial cumulative impacts on museum collections in the region because the national battlefield's collections would be adequately stored and protected. This alternative's contribution would be a small part of the overall cumulative impact.

The impacts on the museum collections under this alternative would not constitute impairment of the national battlefield's resources and values.

Alternative C

Impacts on the museum collections would be the same as alternative B because the adaptive reuse of existing space would result in the same state-of-the-art facility and the same level of protection and display as under alternative B.

CULTURAL LANDSCAPES

AFFECTED ENVIRONMENT

According to the NPS *Cultural Resource Management Guideline*, a cultural landscape is a reflection of human adaptation and use of natural resources, and it is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built.

At the time of the battle, the valley of Wilson's Creek was a thriving agricultural setting with several farms and homes for numerous families. Only a few remnants of this agricultural community remain. Other landscape features played key roles in the outcome of the battle.

The battlefield landscape at Wilson's Creek retains fair-to-good physical integrity. The vegetative changes that have taken place since the battle are reversible. Vegetation management consistent with the national battlefield's fire management plan (NPS 2004) and recommendations in the "Cultural Landscape Report for Wilson's Creek National Battlefield" (NPS 2004) can modify the national battlefield's appearance to resemble more closely the historic conditions, thereby enhancing the national battlefield's integrity.

Important elements of the battlefield landscape such as the Wire Road, the York Road, Double Spring, the Guinn farm site, and areas of combat (i.e. cannon captured) are located in the southwest addition lands recently added to the national battlefield and that are addressed by this amendment.

INTENSITY DEFINITIONS

The following are the definitions for intensity levels for cultural landscapes in this document.

Negligible: Impact(s) is at the lowest levels of detection with neither adverse nor beneficial consequences. The determination of effect for Section 106 would be *no adverse effect*.

Minor: Adverse impact — Alteration of a pattern(s) or feature(s) of the landscape would not diminish the overall integrity of the landscape. The determination of effect for Section 106 would be *no adverse effect*.

Moderate: Adverse impact — Alteration of a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the landscape. The determination of effect for Section 106 would be *adverse effect*. A memorandum of agreement is executed among the National Park Service and applicable state or tribal historic preservation officer and, if necessary, the Advisory Council on Historic Preservation in accordance with 36 CFR 800.6(b). Measures identified in the memorandum of agreement to minimize or mitigate adverse impacts reduce the intensity of impact under the National Environmental Policy Act from major to moderate.

Major: Adverse impact — Alteration of a pattern(s) or feature(s) of the landscape would diminish the overall integrity of the landscape. The determination of effect for Section 106 would be *adverse effect*. Measures to minimize or mitigate adverse impacts cannot be agreed upon and the National Park Service and applicable state or tribal historic preservation officer and/or Advisory Council are unable to negotiate and

execute a memorandum of agreement in accordance with 36 CFR 800.6(b).

IMPACTS ON CULTURAL LANDSCAPES

Alternative A — No-Action

Under the no-action alternative, mowing and vegetation patterns would be maintained at the 20-acre site of the Civil War Museum. Existing landscape conditions on the southwest addition lands, including the presence of nonhistoric structures, would continue. This would continue to result in long-term, negligible, adverse impacts on cultural landscapes.

However, acquisition of these two areas as a result of the boundary adjustment provides some protection from modern development. Maintenance of the landscapes would provide minimal screening from modern visual and auditory intrusions. These conditions would continue to result in long-term, negligible, beneficial impacts on land use and views and vistas that contribute to the cultural landscape.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect the cultural landscape at and adjacent to the national battlefield. The national battlefield currently encompasses approximately 80% of the area that actually was used during the Battle of Wilson's Creek. Since the time of the battle, most areas inside and outside the current national battlefield boundary have been developed for intensive agricultural use. Developed agriculture remains common in some areas adjacent to the national battlefield, including areas on which the battle was fought. Other areas are experiencing increased suburban development. Together these actions have resulted in a long-term, moderate adverse impact on cultural landscapes in the region.

Much of the cultural landscape within the national battlefield has converted to dense forest with shrubby undergrowth. In addition, several species of exotic, invasive plants have become pervasively established. In essence, the entire landscape as it existed at the time of the battle (i.e., open fields and oak savanna) has been altered to such a degree that little of the historical setting remains. Recent efforts, however, have begun to gradually restore the landscape to its 1861 condition, resulting in a long-term, minor beneficial impact on cultural landscapes.

As residential and other urban development continues in the area, including construction and modification of transportation corridors, modern components increasingly would be visible from points within the national battlefield and would contribute to visual degradation of the landscape, resulting in a long-term, minor adverse impact on cultural landscapes in the region.

The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be relatively small part of the overall cumulative impacts.

Conclusion. Maintaining mowing and vegetation patterns at the 20-acre site of the Civil War Museum and existing landscape conditions and nonhistoric structures on the southwest addition lands would continue to have a long-term, negligible, adverse impact on the national battlefield's cultural landscapes.

Acquisition of the two addition areas as a result of the boundary adjustment provides some protection from modern development. Maintenance of the landscapes would provide minimal screening from modern visual and auditory intrusions. These conditions would continue to result in long-term, negligible, beneficial impacts.

The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be relatively small part of the overall cumulative impacts.

The impacts on the cultural landscape under this alternative would not constitute impairment of the national battlefield's resources and values.

Alternative B — Preferred Alternative

Under the preferred alternative, about 75% or 15 acres of the 20-acre site of the Civil War Museum would be included in the Battlefield Landscape Enhancement prescription. Portions of the southwest addition lands, including the York and Wire Road corridors, would be included in this area as well. This would provide for the restoration of all battlefield-related features in these areas. Nonhistoric structures in the southwest addition lands, including the house, pump house, concrete slabs, electrical service and other utilities, would be removed. Other portions of the southwest addition lands would be included in the Landscape Maintenance prescription, which would provide enhanced screening from modern visual and auditory intrusions. Sensitive natural and cultural resources would be included in the Resource Preservation prescription. These actions would result in long-term, minor to moderate beneficial impacts on circulation, views and vistas, and vegetation associated with the national battlefield's cultural landscapes.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect the cultural landscape at and adjacent to the national battlefield. The national battlefield encompasses about 80% of the area that actually was used during the Battle of Wilson's

Creek. Since the time of the battle, most areas inside and outside the current national battlefield boundary were developed for intensive agricultural use. Developed agriculture remains common in some areas adjacent to the national battlefield, including areas on which the battle was fought. Other areas are experiencing increased suburban development. These actions have resulted in a long-term, moderate, adverse impact on cultural landscapes associated with the national battlefield.

Much of the cultural landscape within the national battlefield has converted to dense forest with shrubby undergrowth. In addition, several species of exotic, invasive plants have become pervasively established. In essence, the entire landscape as it existed at the time of the battle (i.e., open fields and oak savanna) has been altered to such a degree that little of the historical setting remains. Recent efforts, however, have begun to gradually restore the landscape to its 1861 condition, resulting in a long-term, minor beneficial impact on the national battlefield's cultural landscapes.

As residential and other urban development continues in the area, including construction and modification of transportation corridors, modern components increasingly will be visible from points within the national battlefield and would contribute to visual degradation of the landscape, resulting in a long-term, minor adverse impact on cultural landscapes in the region.

The preferred alternative would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impact.

Conclusion. The preferred alternative would have minor to moderate, long-term, beneficial impacts on circulation, views and vistas, and vegetation associated with the national

battlefield's cultural landscapes. Acquisition of the two addition areas as a result of the boundary adjustment would provide some protection from modern development. The application of management techniques described in the Battlefield Landscape Enhancement and Landscape Maintenance prescriptions would provide protection from modern development and screening from modern visual and auditory intrusions.

The preferred alternative would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impact.

The impacts on the cultural landscape under this alternative would not constitute impairment of the national battlefield's resources and values.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of alternative B would have *no adverse effect* on the cultural landscape of Wilson's Creek National Battlefield.

Alternative C

Under alternative C, about 75% or 15 acres of the 20-acre site of the Civil War Museum would be included in the Landscape Maintenance prescription. Portions of the southwest addition lands along the national battlefield boundary would be included in this area as well. This would enhance the appearance of the landscape as well as provide screening from modern auditory and visual impacts. Nonhistoric structures in the southwest addition lands, including the house, pump house, concrete slabs, electrical service and other utilities, would be removed.

Sensitive natural and cultural resources would be included in the Resource Preservation prescription. These actions would result in long-term, minor, beneficial impacts on circulation, views and vistas, and vegetation associated with the national battlefield's cultural landscapes because it would enhance visitor's opportunities to experience the rural character of the battlefield, but not as much as in alternative B where more land is in the Battlefield Landscape Management prescription.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect the cultural landscape at and adjacent to the national battlefield. The national battlefield encompasses about 80% of the area that actually was used during the Battle of Wilson's Creek. Since the time of the battle, most areas inside and outside the current national battlefield boundary were developed for intensive agricultural use. Developed agriculture remains common in some areas adjacent to the national battlefield, including areas on which the battle was fought. Other areas are experiencing increased suburban development. These actions have resulted in long-term, moderate, adverse impacts on cultural landscapes associated with the national battlefield and in the region.

Much of the cultural landscape within the national battlefield has converted to dense forest with shrubby undergrowth. In addition, several species of exotic, invasive plants have become pervasively established. In essence, the entire landscape as it existed at the time of the battle (i.e., open fields and oak savanna) has been altered to such a degree that little of the historical setting remains. Recent efforts, however, have begun to gradually restore the landscape to its 1861 condition, resulting in a long-term, minor, beneficial impact on cultural landscapes in the national battlefield.

As residential and other urban development continues in the area, including construction

and modification of transportation corridors, modern components increasingly would be visible from points within the national battlefield and would contribute to visual degradation of the landscape, resulting in a long-term, minor adverse impact on cultural landscapes in the region.

Alternative C would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impacts.

Conclusion. Alternative C would have minor, long-term, beneficial impacts on the circulation, views and vistas, and vegetation associated with the national battlefields' cultural landscapes. Acquisition of the two addition areas as a result of the boundary adjustment and the application of management techniques described in the Landscape Maintenance prescription would

provide screening from modern visual and auditory intrusions.

Alternative C would contribute a negligible to minor long-term, beneficial component to the overall cumulative long-term, minor to moderate, adverse impacts on the cultural landscapes in the region. This alternative's contribution would be a small part of the overall cumulative impacts.

The impacts on the cultural landscape under this alternative would not constitute impairment of the national battlefield's resources and values.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of alternative C would have *no adverse effect* on the cultural landscape of Wilson's Creek National Battlefield.

VISITOR USE AND EXPERIENCE

AFFECTED ENVIRONMENT

According to NPS *Management Policies 2006*, the enjoyment of Wilson's Creek National Battlefield resources and values by current and future generations is a fundamental purpose of all national battlefields. The National Park Service is committed to providing appropriate, high-quality opportunities for visitors to enjoy the parks and will maintain an atmosphere that is open, inviting, and accessible to every segment of society.

Many visitors to Wilson's Creek National Battlefield begin their visit at the visitor center, where they can receive an orientation to the national battlefield, talk with NPS staff, buy materials at the cooperating association sales area, and see exhibits about the battle. A 14-minute video at the visitor center presents the battle's historical background. In addition, an eight-minute program conducted on a lighted battle map illustrates the course of the battle. About 50% of visitors to the national battlefield use the visitor center to see the video, exhibits, or lighted battle map. The visitor center is accessible by wheelchair from the parking area.

An excellent Civil War research library in the visitor center is open to visitors and researchers on an advanced reservation basis, although only a small percentage of visitors use the library. The research library does not maintain open stock or permit visitors to check out material.

Living history programs depicting Civil War soldier life are presented, and guided tours of Bloody Hill are provided on weekends during the summer. In addition, NPS staff and volunteers present several special events throughout the year, including a moonlight tour and anniversary celebration in August, artillery and musket-firing demonstrations in the summer, and several genealogical programs.

The 4.9-mile paved tour-road loop, with eight interpretive stops at significant battle points, provides a self-guided automobile tour of the battlefield. In addition to the tour-road loop, there are five walking trails (varying in length from 0.25 to 0.75 of a mile) that are accessible to visitors from the tour-road loop that provide access to additional battle-related sites. One trail leads to the Ray House, a historic house built before the battle that served as a temporary field hospital for Confederate soldiers following the battle. The body of General Nathaniel Lyon was taken here after he was killed in battle; the bed on which the general's body was placed remains on exhibit in one of the house's rooms.

The Civil War Museum provides a broader contextual view of the Battle of Wilson's Creek and the Civil War west of the Mississippi River. Visitors to the Civil War Museum must exit the main national battlefield to Highway ZZ and drive north 0.25 mile to the museum.

Viewing the artifacts in the Civil War Museum collection has a substantial effect on visitor understanding of the Battle of Wilson's Creek and the war in the Trans-Mississippi West. Because the actions in the action alternatives could have a beneficial effect on visitor opportunities to see the Civil War collection, this topic has been carried forward for further analysis.

INTENSITY DEFINITIONS

The following are the definitions for intensity levels for visitor use and experience in this document.

Negligible: Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. The visitor would not likely be

aware of the effects associated with the actions proposed in the alternative.

Minor: Changes in visitor use and/or experience would be detectable, although the changes would be slight. The visitor would be aware of the effects associated with implementing the alternative, but the effects would be slight.

Moderate: Changes in visitor use and/or experience would be readily apparent. The visitor would be aware of the effects associated with implementing the alternative and would likely be able to express an opinion about the changes.

Major: Changes in visitor use and/or experience would be readily apparent and have substantial consequences. The visitor would be aware of the effects associated with implementing the alternative and would likely express a strong opinion about the changes.

IMPACTS ON VISITOR USE AND EXPERIENCE

Alternative A — No Action

Under the no-action alternative, the visitor experience would remain split between the Civil War Museum and the main national battlefield unit. Many visitors would see either the Civil War Museum or visit main unit to see the battlefield and the exhibits and programs at the visitor center. There would continue to be less potential for an integrated visitor experience. Visitor use would continue to be complicated by the necessity of driving between the two sites. The likelihood that a substantial number of visitors would not enjoy the full range of potential experiences would continue to have a minor, long-term, adverse impact on visitor use and experience.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect visitor use at the national battlefield. Before its establishment in 1960, Wilson's Creek

Battlefield was privately owned and visitation was restricted accordingly. Following establishment of the national battlefield, visitation increased gradually to a high of 262,000 visitors in 1996. Construction of the visitor center and tour-road loop increased the attractiveness of Wilson's Creek National Battlefield as a tourist and recreational destination, and improvements to adjacent roads, including Road ZZ and Route 182, increased accessibility to the national battlefield and surrounding areas. These actions resulted in a long-term, moderate, beneficial impact on visitor use and experience.

The creation of the private General Sweeney's Museum of Civil War History contributed to visitor opportunities to learn about the Battle of Wilson's Creek and the War in the Trans-Mississippi West. The acquisition of this museum by the National Park Service in August 2005 enhances the visitor experience at the national battlefield. As the regional population grows, visitor use of the national battlefield will likely increase and visitation also might grow. Transportation improvements, including widening of County Roads M and MM and construction of the Highway 60 Bypass, would contribute to increased visitor use of the national battlefield and surrounding areas, resulting in a long-term, moderate, beneficial impact on visitor use and experience in the region and at the national battlefield.

The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate, beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a relatively small component of the overall cumulative impacts.

Conclusion. The no-action alternative would continue to have a minor, long-term, adverse impact on visitor use at the national battlefield.

The no-action alternative would contribute a negligible, long-term, beneficial component to the overall cumulative long-term, moderate beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a relatively small component of the overall cumulative impacts.

Alternative B — Preferred Alternative

Under the preferred alternative, the visitor experience would be consolidated at the main national battlefield unit. This would enable visitors to have a unified experience in one museum that incorporates artifacts and stories presently interpreted in the Civil War Museum and the visitor center. Trail construction in the southwest addition lands would increase visitor access to the national battlefield. The integrated approach to visitor experience at the main unit combined with increased access would enhance the visitor experience at the national battlefield, resulting in moderate, long-term, beneficial impact on visitor use and experience.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect visitor use at the national battlefield. Before its establishment in 1960, Wilson's Creek Battlefield was privately owned and visitation was restricted accordingly. Following establishment of the national battlefield, visitation increased gradually to a high of 262,000 visitors in 1996. Construction of the visitor center and tour-road loop increased the attractiveness of Wilson's Creek National Battlefield as a tourist and recreational destination, and improvements to adjacent roads, including Road ZZ and Route 182, increased accessibility to the national battlefield and surrounding areas. These actions resulted in long-term, moderate beneficial impacts on visitor use and experience.

The creation of the private General Sweeney's Museum of Civil War History contributed to visitor opportunities to learn about the Battle of Wilson's Creek and the War in the Trans-Mississippi West. The acquisition of this museum by the National Park Service in August 2005 enhances the visitor experience. As the regional population grows, visitor use of the national battlefield will likely increase and visitation also might grow. Transportation improvements, including widening of County Roads M and MM and construction of the Highway 60 Bypass, would contribute to increased visitor use of the national battlefield and surrounding areas, resulting in long-term, moderate, beneficial impacts on visitor use and experience in the region and at the national battlefield.

The preferred alternative would contribute a minor, long-term, beneficial component to the overall cumulative long-term, moderate beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a small part of the overall cumulative impacts.

Conclusion. The preferred alternative would have a moderate, long-term, beneficial impact on visitor use and experience at the national battlefield.

The preferred alternative would contribute a minor, long-term beneficial component to the overall cumulative long-term, moderate beneficial impacts on visitor use and experience in the region. This alternative's contribution would be a small part of the overall cumulative impacts.

Alternative C

Impacts on visitor use and experience would be the same as alternative B because opportunities for visitor experience of the museum collections and the battlefield landscape would be the same as under alternative B.

NPS OPERATIONS

AFFECTED ENVIRONMENT

NPS *Management Policies 2006* state that park units will pursue a human resources program that is comprehensive, that is based on competency, and that encompasses the entire workforce, including employees, volunteers, contractors, concession employees, interns, and partners.

The *Wilson's Creek National Battlefield Business Plan* identifies five functional areas for national battlefield activities. These include resource protection, visitor experience and enjoyment, facility operations, maintenance, and management and administration. These functional areas oversee 35 programs. Most of these operations are concentrated at the main national battlefield unit. However, some staff time is dedicated to the operations, management, and protection of the Civil War Museum. There are a total 26 full-time employees (FY2006) at the national battlefield. Staff time at Wilson's Creek is supplanted by an active volunteer program that contributes on average more than 5,000 hours yearly.

The business plan recommends staffing increases in a number of areas including education and interpretation and law enforcement. These recommended staff increases would be sufficient to address the actions analyzed in this environmental assessment. As a result, this amendment recommends no staffing increases.

INTENSITY DEFINITIONS

Implementation of a project can affect the operations of a park unit, such as the number of employees needed, the type of duties that need to be conducted, when/who would conduct these duties, how activities should be

conducted, and administrative procedures. The intensity thresholds used to assess potential changes to NPS operations are defined as follows:

Negligible: NPS operations would not be affected or the effect would be at or below the lower levels of detection, and would not have an appreciable effect.

Minor: The effect would be detectable, but would be of a magnitude that would not have an appreciable adverse or beneficial effect on NPS operations. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.

Moderate: The effects would be readily apparent and would result in a substantial adverse or beneficial change in operations in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.

Major: The effects would be readily apparent and would result in a substantial adverse or beneficial change in operations in a manner noticeable to staff and the public, and changes would be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, could be expensive, and their success could not be guaranteed.

IMPACTS ON NPS OPERATIONS

Alternative A — No Action

Under the no-action alternative, NPS staff time would continue to be split between the Civil War Museum and the main unit. Law enforcement rangers would continue to patrol both the museum site and the main unit, reducing the effectiveness of security procedures. Traffic circulation for visitors and staff between the two sites would continue to have the potential for accidents on County

Road ZZ. These conditions would continue to result in long-term, minor, adverse impacts on NPS operations.

Cumulative Impacts. The development of the visitor center and library at the main unit enhanced the effectiveness of NPS operations, resulting in a long-term, moderate beneficial impact on operations. The acquisition of the former General Sweeney Museum of Civil War History placed additional demands on NPS staff, resulting in a long-term, minor, adverse impact on NPS operations.

The no-action alternative would contribute a minor, long-term adverse component to cumulative minor to moderate, beneficial impacts on NPS operations. This alternative's contribution would be a modest part of the overall cumulative impact.

Conclusion. The no-action alternative would continue to have a minor, long-term, adverse effect on NPS operations.

The no-action alternative would contribute a minor, long-term adverse component to cumulative minor to moderate, beneficial impacts on NPS operations. This alternative's contribution would be a modest part of the overall cumulative impact.

Alternative B — Preferred Alternative

Under the preferred alternative, NPS staff would be consolidated at the main unit to a greater degree than under the no-action alternative due to the fact that the museum collections would be moved to the visitor center (main unit). The consolidation of administrative functions would enable the Park Service to remove the trailers currently used by the Inventory and Monitoring program staff and the nonhistoric structures on the 154-acre site, including the house, pump house, concrete slabs, electrical service and other utilities, thus reducing the number of assets in the battlefield inventory and

increasing operational efficiency. The new addition to the visitor center would incorporate sustainable design practices, increasing energy efficiency and enhancing overall operational efficiency. Law enforcement rangers would concentrate more of their patrol activities in the main battlefield unit. The consolidation of functions would reduce visitor and staff traffic circulation between the two sites, thus reducing the potential for accidents on County Road ZZ. These conditions would result in long-term, minor to moderate beneficial impacts on NPS operations. There would be some short-term, minor adverse impacts on operations resulting from construction activities.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect NPS operations at the national battlefield. The development of the visitor center and library at the main unit enhanced the effectiveness of NPS operations, resulting in a long-term, moderate beneficial impact on operations. The acquisition of the former General Sweeney Museum of Civil War History placed additional demands on NPS staff, resulting in a long-term, minor, adverse impact on operations.

The preferred alternative would contribute a minor, long-term, beneficial component to cumulative minor to moderate, beneficial impacts on operations. This alternative's contribution would be a modest part of the overall cumulative impact.

Conclusion. The preferred alternative would have a minor to moderate, long-term, beneficial effect on NPS operations.

The preferred alternative would contribute a minor, long-term beneficial component to cumulative minor to moderate, beneficial impacts on operations. This contribution would be a modest part of the overall cumulative impact.

Alternative C

Under alternative C, NPS administrative functions would be consolidated at the 20-acre site. NPS interpretive operations would be consolidated at the main unit. The use of the structures on the 20-acre site would enable the Park Service to remove the trailers currently used by the Inventory and Monitoring program staff and the nonhistoric structures on the 154-acre site, thus reducing the number of assets in the battlefield inventory and increasing operational efficiency. The redesign of the existing visitor center space for museum and curatorial space would incorporate sustainable design practices, increasing energy efficiency. Law enforcement rangers would concentrate their patrol activities at the main unit but not to as great a degree as in alternative B. A greater number of staff at the 20-acre site would result in a slightly higher risk for accidents than in alternative B. These actions would result in minor, long-term, beneficial impacts on NPS operations. There would be some short-term, minor, adverse impacts on operations resulting from construction activities.

Cumulative Impacts. A variety of past, present, and reasonably foreseeable actions have affected and would continue to affect visitor use at the national battlefield. The

development of the visitor center and library at the main unit enhanced the effectiveness of NPS operations, resulting in a long-term, moderate beneficial impact on operations. The acquisition of the former General Sweeney Museum of Civil War History placed additional demands on NPS staff, resulting in a long-term, minor, adverse impact on operations.

Alternative C would contribute a minor, long-term beneficial component to cumulative minor to moderate, beneficial impacts on operations. This contribution would be a small to modest part of the overall cumulative impact.

Conclusion. Alternative C would have a minor, long-term, beneficial effect on NPS operations.

Alternative C would contribute a minor, long-term beneficial component to cumulative minor to moderate, beneficial impacts on operations. This contribution would be a small to modest part of the overall cumulative impact.

CONSULTATION AND COORDINATION



PUBLIC INVOLVEMENT AND CONSULTATION

PUBLIC INVOLVEMENT

Internal NPS scoping was conducted with a team of planning professionals to develop preliminary management options. These options were outlined in a December 2006 newsletter that was sent to all agencies, government entities, and members of the public that participated in the planning process for the 2003 *General Management Plan*. About 350 newsletters were distributed. In addition, a press release was mailed to local newspapers and TV and radio stations. The newsletter was also posted on the national battlefield website and the NPS planning website (<http://parkplanning.nps.gov>). Comments were accepted if they were mailed or emailed directly to the battlefield or posted on the planning website.

This environmental assessment has been made available to the public via a press release mailed to more than 350 local newspapers, TV and radio stations, local agencies, and interested members of the public.

CONSULTATION WITH INDIAN TRIBES AND OTHER AGENCIES

The national battlefield has consulted with American Indian tribes that have demonstrated interest in the areas within Wilson's Creek National Battlefield. The environmental assessment has been sent to the Osage, Delaware, and Cherokee Nations.

The Missouri State Historic Preservation Officer was involved in the internal NPS scoping at the beginning of the planning process and is being sent a copy of this environmental assessment for comment.

The national battlefield has consulted with the Missouri Department of Conservation on special status species and species of concern that have been found on the national

battlefield. The environmental assessment has been sent to the department for review and comment.

In accordance with Section 7 of the Endangered Species Act, the National Park Service has submitted the environmental assessment to the U.S. Fish and Wildlife Service. The National Park Service seeks concurrence with its finding of no effect on special status species.

AGENCIES AND ORGANIZATIONS RECEIVING A COPY OF THIS DOCUMENT

Federal Agencies and Officials

Advisory Council on Historic Preservation
Environmental Protection Agency
Mark Twain National Forest
National Park Service, American Battlefield Protection Program
National Park Service
Chickamauga and Chattanooga National Military Park
Fort Scott National Historic Site
Midwest Archeological Center
Pea Ridge National Military Park
Springfield National Cemetery
U.S. Army
Fort Leavenworth, Kansas
Fort Leonard Wood, Missouri
Fort Sill, Oklahoma
U.S. Fish and Wildlife Service

U.S. Senators and Representatives

Honorable Roy Blunt, House of Representatives
Honorable Christopher Bond, Senator
Honorable Claire McCaskill, Senator

State Agencies

Fort Davidson State Historic Site
Missouri Department of Natural Resources
Missouri Department of Transportation
Missouri Division of Tourism
Missouri State Historic Preservation Office
Missouri State University
Northwestern University
Prairie Grove Battlefield State Historic Site
Texas Historical Commission

State Officials

Honorable Matt Blunt, Governor
State Representative Jim Viebrock
State Senator Norma Champion
State Senator Dan Clemens
State Senator Emory Melton
State Senator Morris Westfall

Tribal Governments

Delaware Nation
Osage Nation
Southern Cherokee Nation

Local and Regional Agencies, Officials, Media, and Organizations

Association of Civil War Round Table
Battlefield Volunteer Fire Department
Blue and Gray Education Society
Brookline Volunteer Fire Department
Christian County Commission
Christian County Planning
Christian County Sheriff
City of Battlefield
City of Republic
City of Springfield
Civil War Round Table of Kansas City
Civil War Round Table of the Ozarks

Community Foundation of the Ozarks
Daughters of Union Veterans
Discovery Center, Springfield Missouri
Drury University
Greater Ozarks Audubon Society
Greene County Archives
Greene County Commission
Greene County Highway Department
Greene County Planning and Zoning
Hinze Civil War Tours, Inc.
James River Partnership
KAMO Electric
KTTS News
Missouri Civil War Re-enactors
Missouri Equine Council
MSU Council of Governments
National Park Foundation
National Parks and Conservation Association
Ozark Electric Cooperative
Ozark Greenways
Ozark Watershed Committee
Ozarks Highlands Grotto
Ozarks Technical College
Public Water Supply District # 1
Ralph Foster Museum
Republic Public Schools
Ride for USA
Sierra Club, Ozarks Chapter
Silver Dollar City
Sons of Confederate Veterans
Sons of Union Veterans
Springfield Chamber of Commerce
Springfield City Utilities
Springfield Convention and Visitor Bureau
Springfield Greene County Library
Springfield Greene County Parks
Springfield History Museum
Springfield Planning and Development
SW Missouri Indian Center
The Trust for Public Land
University of Arkansas
Wilson's Creek Landowners Association
Wilson's Creek National Battlefield
Foundation

APPENDIX: CONSTRUCTION COST ESTIMATES

Alternative Actions	Alternative A Costs	Alternative B Costs	Alternative C Costs
Design of new addition	\$0	\$258,000	\$0
Design of visitor center rehabilitation			\$143,000
Design of new exhibits	\$0	279,000	235,000
Construction of new addition	\$0	1,520,000	\$0
Rehabilitate visitor center as collections exhibit and storage space	\$0	\$0	840,000
New exhibits fabrication	\$0	995,000	840,000
Rehabilitate Civil War Museum for I&M group	\$0	262,500	262,500
Rehabilitate house on 20- acre site	\$0	\$0	\$1,200,000
TOTAL	\$0	\$3,314,500	\$3,462,500

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National Park Service, Department of the Interior

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- 2004 *Wilson's Creek National Battlefield Fiscal Year 2005 Business Plan.*
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- 2006 *NPS Management Policies 2006.* Washington, D.C.

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

